



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,438	08/15/2003	Roger Moulton	SOU747/4-8US	2478

7590 10/22/2008  
Thomas W. Adams  
Renner, Otto, Boisselle & Sklar, L.L.P.  
Nineteenth Floor  
1621 Euclid Avenue  
Cleveland, OH 44115

EXAMINER
----------

OH, TAYLOR V

ART UNIT	PAPER NUMBER
----------	--------------

1625

MAIL DATE	DELIVERY MODE
-----------	---------------

10/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/642,438	<b>Applicant(s)</b> MOULTON ET AL.	
	<b>Examiner</b> Taylor Victor Oh	<b>Art Unit</b> 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,7,22-27,29-34,37,39,41-49,51,52 and 57-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52,58 and 59 is/are allowed.
- 6) ☒ Claim(s) 1,7,22-27,29-34,37,39,41-49,51,57,60-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1625

In view of a decision on the petition in the record on 6/09/2008, the examiner has decided to reopen the prosecution of the application.

**The Status of Claims :**

Claims 1, 7, 22-27,29-34,37,39, 41-49,51-52,57-65 are pending.

Claims 1, 7, 22-27,29-34,37,39, 41-49,51,57, 60-65 are rejected.

Claims 52, and 58--59 are allowable.

Claim 7 is objected.

**DETAILED ACTION**

1. Claims 1, 7, 22-27,29-34,37,39, 41-49,51-52,57-65 are under consideration in this Office Action.

**Priority**

2. It is noted that this application claims benefit of 60/404,178 filed on 8/16/2002; claims benefit of 60/404,202 filed on 8/16/2002.

**Drawings**

3. None.

***Claim Objections***

Claim 7 is objected to because of the following informalities:

In claim 7 , the phrase “ the composition of claim 6 “ is recited. This is improper because it depends on the rejected claim. Therefore,. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 7, 22-27,29-34,37,39, 41-49,51,57, 60-65, and their corresponding dependent claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 27, the phrase “ the group consisting of divalent heteroaromatic groups comprising only one heteroatom” is recited. This expression is vague and indefinite because the term “comprising “ would mean that there are some additional components besides only one heteroatom; the skilled artisan in the art is unable to figure out what else is present in the divalent heteroaromatic groups. Therefore,. Appropriate correction is required.

In claim 43, the phrase “ an anion having the following structure :



III

“ and “R1,R2, R3, R4

and R5 are a hydrogen and a carbon-containing group” are recited.

These expressions are vague and indefinite because the variable R3 requires two bonds; and the hydrogen atom can not be used for the R3 since it has only one bond to shared with other groups. Therefore, an appropriate correction is required.

The phrase “a carbon-containing group” is also vague and indefinite because the specification does not elaborate what is meant by the term “a carbon-containing group”. It may mean that a compound contains carbon, but there are numerous contains carbons ; there is uncertainty as to what kind of “a carbon-containing group”. can be suitable for the claimed invention. Therefore, an appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 1625

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

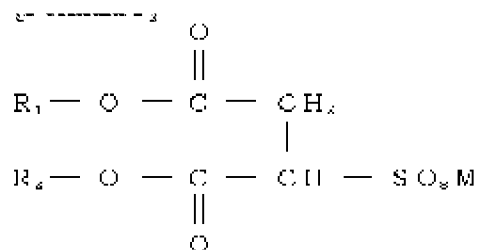
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim\*\*\* rejected under 35 U.S.C. 103(a) as being unpatentable over \*\*\*.

1. Claims 1, 7, 22-27, 29-34, 37, 39, 41-49, 51, 57, 60-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al (JP08-030013).

Kaneko et al discloses an image removal promoting solution containing the followings (see page 7, formula 3 and 4) :

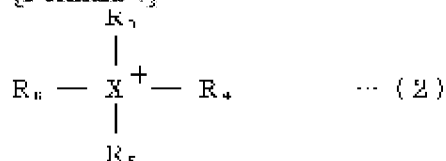
Art Unit: 1625



(The inside of a formula, R1, R2: The same or the alkyl group of the carbon numbers 4-14 which may be different from each other and may branch, M:alkali-metal ion, the 4th class ammonium, the 4th class phosphonium, alkanolamine cation)

When M of a before type (1) furthermore uses the dialkyl sulfo succinate chosen from the group which consists of sodium ion, a lithium ion, the 4th class ammonium shown by the bottom formula (2), the 4th class phosphonium, and an alkanolamine cation, aging of image removal promotion liquid is small, and since the stable removal property is acquired, it is still more desirable.

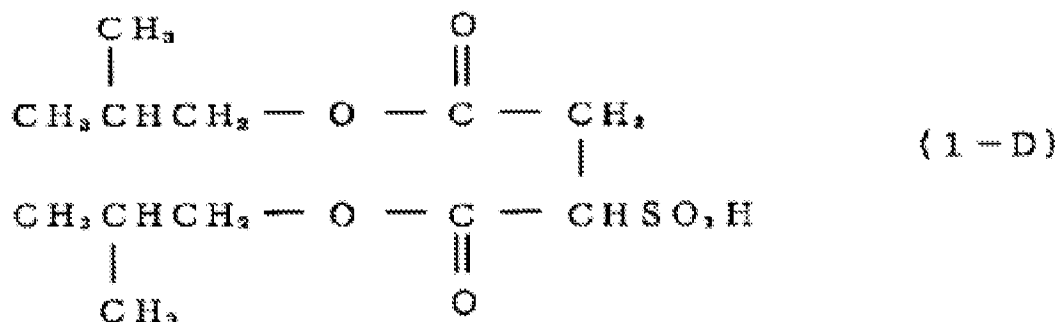
[Formula 4]



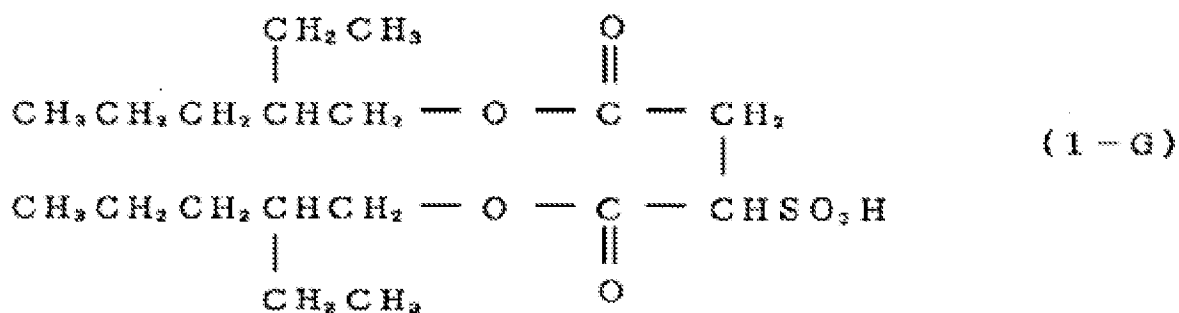
(For the inside of a formula, and X, nitrogen or Lynn, and R3-R6 are hydrogen, the alkyl group of carbon numbers 1-4, a hydroxyalkyl radical, and an alkyl halide radical)

Furthermore, the formula (1-A) (docusate) is represented as a surfactant (see page 8 at the top).

Art Unit: 1625



(see page 8, lower middle)



(see page 8 , upper middle).

In order to acquire the removal property of the good image formation matter also in the passage of time, as for the amount of a hydroxide as shown by said formula (2-A) - (2-I), and alkanolamine, it is desirable to be added to the number of mols of a front-type (1) compound, so that it may become 50 % of the weight or more (see page 11, paragraph# 0010).

However, the instant invention differs from the prior art in that a greater than 70 wt % of the ionic liquid is present in the composition.

With respect to the % difference in the composition, the passages in the prior art (see page 11, paragraph# 0010) indicate that it seems reasonable to have a greater than 50 wt % of the ionic liquid depending on its usage. Therefore, it would have been



Art Unit: 1625

obvious to the skilled artisan in the art to be motivated to adjust the concentration of the ionic liquid depending on its usage by routine experimentation. This is within the purview of the skilled artisan in the art .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Taylor Victor Oh, MSD,LAC  
Primary Examiner  
Art Unit: 1625

Application/Control Number: 10/642,438  
Art Unit: 1625

Page 9

/Taylor Victor Oh/

Primary Examiner, Art Unit 1625

10/20/08